



1239452
[0075861H]

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

3100 Port of Benton Blvd • Richland, WA 99354 • (509) 372-7950
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

July 14, 2016

16-NWP-120

Ms. Stacy L. Charboneau, Manager
Richland Operations Office
United States Department of Energy
PO Box 550, MSIN: A7-50
Richland, Washington 99352

Mr. John A. Ciucci, President and CEO
CH2M HILL Plateau Remediation Company
PO Box 1600, MSIN: H7-30
Richland, Washington 99352

Re: Part A Review Comment Record for the Solid Waste Operating Complex (SWOC) Part B Permit Application

References: See page 2

Dear Ms. Charboneau and Mr. Ciucci:

The Department of Ecology (Ecology) is conducting the technical review of the proposed Part B Permit Application for the SWOC (Reference 1). We completed the technical review of the Part A for all three Operating Unit Groups, and enclose a Review Comment Record (RCR) documenting Ecology's notice of deficiency comments.

Ecology's completeness determination letter (Reference 2) stated we would provide a comprehensive list of information needed to complete the permit application. However, Ecology, USDOE-RL, and CHPRC met and agreed to provide these information needs within the technical review RCR documents.

Many of the comments here are applicable to other specific Addenda and the changes may be more appropriately addressed in those Addenda (primarily Addenda B and C). Further, the Part As should not be considered complete until the other Addenda are also completed.

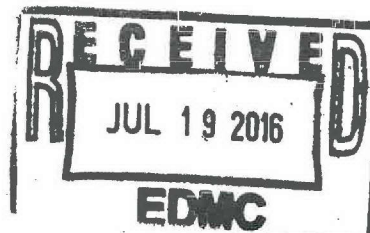
Ecology looks forward to discussing these comments with USDOE-RL and CHPRC.

Please contact me, or your staff may contact Stuart Luttrell, Acting Project Manager for SWOC, at Stuart.Luttrell@ecy.wa.gov or (509) 372-7883.

cc: See page 2

Sincerely,

Suzanne Dahl
Tank Waste Treatment Section Manager
Nuclear Waste Program



sl/jvs

Enclosure



Ms. Charboneau and Mr. Ciucci
July 14, 2016
Page 2

16-NWP-120

Reference 1: Letter 16-ESQ-0028, dated January 28, 2016, from Stacy Charboneau, USDOE-RL to J. A. Hedges, Ecology, "Submittal of DOE/RL-2015-74, Hanford Facility Dangerous Waste Part B Permit Application; Low-Level Burial Grounds Trenches 31-34-94, T Plant Complex, and Central Waste Complex – Waste Receiving and Processing Facility Operating Unit Groups" 1235574

Reference 2: Letter 16-NWP-083, dated May 12, 2016, from Suzanne Dahl, Ecology, to Stacy Charboneau, USDOE-RL and John A. Ciucci, CH2M HILL Plateau Remediation Company, "Completeness Determination for the Hanford Facility Dangerous Waste Part B Permit Application; Low-Level Burial Grounds Trenches 31-34-94, T Plant Complex, and Central Waste Complex – Waste Receiving and Processing Facility Operating Unit Groups" 1238332

cc electronic w/enclosure:

Dave Bartus, EPA
Dennis Faulk, EPA
Duane Carter, USDOE
Cliff Clark, USDOE
Michael Collins, USDOE
Al Farabee, USDOE
Tony McKarns, USDOE
Erika Garcia, CHPRC
Sarah Horn, CHPRC
Stephanie Johansen, CHPRC
Paul Martin, CHPRC
Ken Niles, ODOE

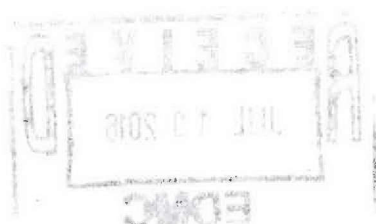
Debra Alexander, Ecology
Elis Eberlein, Ecology
Stuart Luttrell, Ecology
John Price, Ecology
Ron Skinnarland, Ecology
John Temple, Ecology
Nancy Ware, Ecology
CHPRC Correspondence Control
Environmental Portal
Hanford Facility Operating Record
USDOE-RL Correspondence Control

cc w/enclosure:

Rod Skeen, CTUIR
Gabriel Bohnee, NPT
Russell Jim, YN
Steve Hudson, HAB
Administrative Record: Hanford Site-wide Permit
NWP Central File

cc w/o enclosure:

NWP Reader File



Review Comment Record	Washington State Department of Ecology Nuclear Waste Program	Date: July 13, 2016
Document Title(s)/Number(s): DOE/RL-2015-74, Hanford Facility Dangerous Waste Part B Permit Application; Low-Level Burial Grounds Trenches 31-34-94, T Plant Complex, and Central Waste Complex-Waste Receiving and Processing Facility		Page 1 of 10

#	Addendum/ Section	Comment or Question	Modification Needed	Basis/Justification	DOE/PRC Response	Ecology Response	Disposition
General comments applicable to Addendum A for all three Operating Unit Groups.							
1	Part A, XI, Nature of Business	The "Nature of Business" brief description does not adequately describe all dangerous and non-dangerous waste areas and activities. The level of detail should reflect the size and complexity of the unit group. (this may have been met for SWOC)	Section XI needs to be updated to include non-dangerous waste areas and activities.	-803(3)(m) A brief description of the nature of the business; <u>1/26/16 workshop agreement:</u> The "Nature of Business" section in each unit group Part A should include the information required by ECY 030-31 (6/2003) <i>Washington State Dangerous Waste Permit Application: Part A Form and Instructions</i> . The information should be specific to the dangerous waste areas and activities, and level of detail should reflect the size and complexity of the unit group.			
2	Part A, XI Attachment A	Attachment A includes a large amount of information that is also provided in other Addenda (primarily Addendum B and C), which increases the chance of inconsistencies between the Part A and the Part B. The information required in the Part A must be based on the Part B and consistent with the Part B. The comments below will require changes in Addenda B and C; therefore, Sections XII and XIII will very likely be revised because the information therein is based on Addenda B and C. As a result, the Part A will be subject to changes and will need to be finalized after Addenda B and C are completed.	It may be in Ecology and DOE's best interest to limit the information in the Part A to what is required by WAC 173-303-803(3) and as described in Ecology Publication 030-31. We expect resolution of Ecology's comments related to specific DWMUs, design capacity, waste analysis and process information, etc. will require a large effort and can be completed during revision of Addenda B and C. [information could be in a summary table rather than in descriptive narratives]				
3	Part A, XI Attachment A	It is unclear how the volumes of estimated annual quantities of both container storage and treatment could be accurate. Storage and treatment generally cannot be concurrently conducted at the maximum capacity identified in the permit modification request. For example, if storage occurs at the capacity documented in the cited document, there simply is no room to conduct treatment. Information in Addendum C does not provide the specific information to support the Part A.	Identify the DWMUs that are storage only and their design capacities. Likewise, clarify what areas are actual treatment only and their capacities. Provide estimated cubic meters or cubic yards of annual container treatment to support estimated annual quantities of waste stored. The permit application must propose a credible mechanism to accommodate joint treatment and storage, or choose to do one or the other.	-803(3)(i) A description of the processes to be used..., and the design capacity of these items; 173-303-803(3)(a),(m) <u>1/26/16 workshop agreement:</u> Defensible design capacities with a basis will be included in the permit application (either in Part A or Part B), and will not include future design capacity that isn't supported by design information in the Part B. Include the basis for amounts listed in Section XII.B in the permit chapter. This information may be included directly in the Part A as an attached table (e.g., Double-Shell Tanks [DST]), or may be included in other addenda like Addendum C, Facility Description and Process Information."			

Review Comment Record		Washington State Department of Ecology Nuclear Waste Program				Date: July 13, 2016		
						Page 2 of 10		
#	Addendum/ Section	Comment or Question	Modification Needed	Basis/Justification	DOE/PRC Response	Ecology Response	Disposition	
4	Part A, XI Attachment A	The uses of and requirements for storing or staging dangerous waste containers on several asphalt surfaces is unclear and inadequate, and is not supported by information in Addendum C.	Please provide specific and detailed information in Addendum C regarding requirements for container storage areas on asphalt. Describe secondary containment that will be used for container storage, not merely a citation of the regulations. Container storage will not be allowed on gravel surfaces.	WAC 173-303-630(7), containment.				
5	Part A, XI, Attachment A	The descriptions and bases for the use of outside areas are in many cases unclear or unsupported.	Clarify the definition, location, and use of "staging areas"(loading and unloading areas is the correct terminology). Many DWMUs include outdoor areas with no description of how and why the entire identified areas will be used, nor why they are included in the DWMUs.	-803(3)(i)				
6	Part A, XI, Attachment A	Ecology does not support use of access ramps or building aprons as storage and/or treatment areas for any period of time. Storing containers in these areas may also create operations hazards.	Remove these approach areas and aprons from areas to be permitted for storage. Clarify the use of these areas as short-term loading and unloading areas only, and only if they will not interfere with access to buildings or stored waste. The design of these areas needs to be described, such as the specific location and boundaries where the activities take place. The locations need to be identified on the topographic map or facility drawing.	-803(3)(i) WAC 173-303-806 (4)(a)				
7	Part A, XI, Attachment A	Clearly identify which areas of a DWMU are used for storage only and treatment only. The Part B must identify the specific location(s) within the DWMU to be utilized for each different type of treatment technology. Otherwise information in the Part A cannot be verified and supported.	Provide reference to the Part B Addendum that identifies these areas and that support the Part A. For each DWMU, location of storage and location of each type of treatment needs to be described in the Part B.	-803(3)(i); 173-303-803(3)(a), (m)				
8	Part A, XI, Attachment A, Table A-2	What are "Part A Treatment" and "Part A Storage" types?	The column headings should be replaced by something like "Treatment Process Code" and "Storage Process Code."	Authorization to operate, either storage or treatment, is NOT established "by Part A."				
9	Part A, XI, Attachment A, Section A3	Many of the treatment technologies require specific equipment to conduct the cited treatment, or containment or safety equipment such as ventilation controls. The Part B (in other Addenda) does not seem to include any documentation of such equipment, so Ecology lacks a basis to authorize most of these treatment technologies.	Provide documentation and description of specific treatment equipment. Describe particular containment or safety equipment, such as ventilation controls. The treatment technologies cannot be authorized without including this information in Addendum C.	-803(3)(i); 173-303-803(3)(a), (m)				

Review Comment Record		Washington State Department of Ecology Nuclear Waste Program				Date: July 13, 2016	
						Page 3 of 10	
#	Addendum/ Section	Comment or Question	Modification Needed	Basis/Justification	DOE/PRC Response	Ecology Response	Disposition
10	Part A, XI, Attachment A, Section A3	The statement regarding secondary containment, "waste containers requiring secondary containment within this area will be stored over devices meeting the requirements of WAC 173-303-630(7)" is insufficient. The permit must describe <u>how</u> these requirements will be met.	Please make reference to Addendum C, and ensure this description of how the requirements are met is provided in Addendum C.	173-303-630(7); -806(4)(b) Specific Part B information requirements for containers;			
11	Part A, XI, Attachment A, Section A6	The text is silent on the disposal path for generated waste streams.	Please make reference to Addendum C, and ensure Addendum C describes how the requirements are met.	-803(3)(i); 173-303-803(3)(a), (m)			
12	Part A, Section XII.B	Design capacity information is not supported by information in the Part A or information in Addendum C, Process Information or Addendum H, Closure Plan. Additional, specific comments related to this deficiency are also provided in comments below.	Include the basis for amounts listed in Section XII.B in the permit chapter. This information may be included directly in the Part A as an attached table, or may be included in other addenda like Addendum C, Facility Description and Process Information. Design capacity must be based on a realistic use of the storage areas (e.g., allowing for access to wastes) in a safe manner. The capacity on Part A of the permit application should reflect what is permitted, or what will be permitted at the time the Permit becomes effective.	-803(3)(i) <u>1/26/16 workshop agreement:</u> Defensible design capacities with a basis will be included in the permit application (either in Part A or Part B), and will not include future design capacity that isn't supported by design information in the Part B.			
13	Section XII	"Process Codes and Design" column C. "Process Total Number of Units" does not contain the correct total number of units.	Update total number of units based on information provided in Addendum C Process Information. Check Addenda B and C, and Addendum H, to ensure the Part A information is consistent with the rest of the unit group permit chapter.	WAC 173-303-040; -803(3)(i) <u>2/2/16 workshop agreement:</u> Column C will reflect the correct number of DWMUs for each type of DWMU in the unit group, and be consistent with information in other Permit addenda (e.g., Addendum C, facility description and process information, Addendum B, waste analysis plans, Addendum H, closure plans). See WAC 173-303-040 definition for "Dangerous waste management unit".			
14	Part A, XIII	The process design information in Addendum C for supporting the Part A Section XIII is incomplete.	The source of the capacities under column B.1 and descriptions in Section D must be included in Addendum C. Addendum C will need to describe the volume and type of treatment technology to be employed for each specific DWMU to support the Part A, Section XIII.	173-303-803(3)(i),(j)			

Review Comment Record		Washington State Department of Ecology Nuclear Waste Program				Date: July 13, 2016	
						Page 4 of 10	
#	Addendum/ Section	Comment or Question	Modification Needed	Basis/Justification	DOE/PRC Response	Ecology Response	Disposition
15	Part A, XV	The topographic map does not meet specific requirements, including but not limited to: buildings and structures including runoff control systems, roads, loading/ unloading areas, storm, sanitary and process sewage systems, and fire control facilities; location/identification of all dangerous waste management processes (example: container storage areas and treatment areas); barriers for drainage or flood control; location of all active and decommissioned wells.	Update the map to include information according to agreements made in the CAP workshops.	173-303-803(3)(I); A topographic map; -806(4)(a)(xviii)(J) 4/26/16 workshop agreements: See table of TOPO map requirements at the end of this document for division of -803/-806 TOPO map requirements between the Hanford Facility site level map and unit group maps. <ul style="list-style-type: none">The title "TSD Unit Boundary" on unit group TOPO maps will be changed to "TSD Unit Group Boundary".The size of the site level map must be adequate to clearly show required TOPO map details.			
			Update the map to show all barriers for drainage or flood control, if applicable. If not, state so in the text.	Will be met on the unit group level map.			
16	Part A, XVI	Does not show areas occupied by all storage, treatment, or disposal operations that are in use;	Show all occupied storage, treatment, and disposal operations that are in use.	-803(3)(h)(i) Workshop agreement: All areas related to treatment, storage, and disposal operations that are in use will be depicted on the scaled drawing.			
17		DWMUs labeled with names of each operation (example: mixed waste container storage area, mixed waste tank storage/treatment etc.).	Show all occupied storage, treatment, and disposal operations that are in use.	-803(3)(h)(i) All areas related to treatment, storage, and disposal operations that are in use will be depicted on the scaled drawing.			
18		Missing other major structures/operations even if not used for dangerous waste management.	Add missing structures	Permanent structures must be included on the unit group drawing. Temporary structures must be included if they are part of the dangerous waste TSD operations or closure (e.g., security trailer entrances into the tank farms, control room by C Farm).			
19	Part A, XVII, Attachment C	Photographs do not clearly delineate all existing DWMU structures in the operating unit group. The photographs do not clearly show all existing areas for storing, treating, recycling, or disposing of dangerous waste; nor do they all include the date the photo was taken.	Include photographs that delineate all major pieces of aboveground operating equipment and design features significant to safely managing waste.	803(3)(h)(ii) 2/2/16 workshop agreements: Photographs must clearly delineate all existing structures. Photographs must clearly delineate all existing areas for storing, treating, or disposing of waste. Photographs must include the month and year taken.			

Review Comment Record		Washington State Department of Ecology Nuclear Waste Program				Date: July 13, 2016	
						Page 5 of 10	
#	Addendum/ Section	Comment or Question	Modification Needed	Basis/Justification	DOE/PRC Response	Ecology Response	Disposition
20	Part A, Section XIX, Comments	Ensure all information listed in the comments section is consistent with the rest of the Part A and unit group permit chapter.	If information is inconsistent, or the information should be contained in another location on the Part A form, please correct/move the information to the appropriate section.	-803(3)(j) <u>2/2/16 workshop agreement:</u> Any information in the Section XIX "Comments" section must be consistent with the rest of the information in the Part A and unit group Permit chapter.			
Comments specific to CWC-WRAP							
21	Part A, XI,	The description does not accurately describe each individual dangerous waste management unit (DWMU).	Information in the Part A should be provided for specific dangerous waste management areas and activities on both the Part A form and in Attachment A for completeness and to avoid any confusion. For example: <ul style="list-style-type: none"> The Low Flashpoint Storage Modules must be listed individually as DWMUs. Each specific waste storage building in the 2402-, 2403-, and 2404-Waste Storage buildings must be listed individually. The 2402-WD, 2403-WD, and 2404-WC Buildings and the 2336-W Building Process Area must be correctly identified as storage and treatment DWMUs. 	-803(3)(m) A brief description of the nature of the business;			
22	Part A, XI, Attachment A, Section A2	The informal policy that EPA and Ecology have agreed to is that activities subject to TSCA (and not otherwise subject to the dangerous waste regulations) should be subject to separate written approval from EPA.	Activities subject to TSCA (and not otherwise subject to the dangerous waste regulations) should be subject to separate written approval from EPA.	Activities subject to TSCA under the authority of EPA.			
23	Part A, XI, Attachment A, Section A5	Calculations for storage capacities are incorrect. For example, Engineering Calculation 946412.15-M-003 for the 2402-W Series Buildings provides as Input 3.3: "For drum arrays inside structures assume storage on rows of pallets (2X2 drum array) separated by three feet aisles..." The drawings and the calculations assume storage on two rows of pallets (four drums wide) separated by three feet aisles. This error is in all calculations.	Provide correct calculations and edit tables to reflect changes.	-803(3)(i) A description of ... the design capacity of these items			
24	Part A, XII	Process total number of units is not correct based on specific DWMUs.	Column C should reflect the correct number of DWMUs; each storage building and low-flashpoint storage module is an individual DWMU and will be included in the number of units.	-803(3)(i) A description of the processes to be used for treating, storing, and disposing of dangerous waste, and the design capacity of these items			
25	Part A, XIII	Column D, Process Description does not identify "Sealing." However, "Sealing" is identified as a process in Addendum C, Table C-3.	Add "sealing" as a process in column D.				

Review Comment Record		Washington State Department of Ecology Nuclear Waste Program				Date: July 13, 2016	
						Page 6 of 10	
#	Addendum/ Section	Comment or Question	Modification Needed	Basis/Justification	DOE/PRC Response	Ecology Response	Disposition
Comments specific to the T Plant Complex							
26	Part A, XI	The list of DWMUs is incorrect, because it identifies both the 2706-T Outside Storage Area and the 2706-TA OSA twice. Discussion after S01 clarify the specific storage capacity as "container" storage capacities.	Correct the list of DWMUs. Add the word, "container" to the storage capacities phrase.	Editorial, correctness.			
27	Part A, XI, Table A-1, T Plant DWMUs, Treatment	Given the wide range of treatment technologies and the particular DWMU capabilities that each requires, it is not sufficient to just say a DWMU is authorized for treatment. Permit authorization must be specific to the wastes and waste treatment technologies that are appropriate for that unit.	Provide reference to Addendum C. Ensure that the Addendum includes the treatment information specific to the wastes and waste treatment technologies that are appropriate for that unit.	-803(3)(i)			
28	Part A, XI, Attachment A, Table A-1, 221-T Cells, Notes	Clarify if cell 16R is part of the 221-T Building.	Include cell 16 R.				
29	Table A-1, T Plant DWMUs, DWMU Name, 221-T Railroad Tunnel	Including the railroad tunnel itself and the outdoor storage areas in a single DWMU may be confusing, because the indoor and outdoor areas may have different waste management capabilities and requirements.	Separate into separate DWMUs, or remove the outdoor areas from the DWMU and allow for staging only in these outdoor storage areas.				
30	Part A, XI, Attachment A, Table A-1, 221-T Head End, Notes	The engineering drawings for all DWMUs must not only indicate the direction of slope, but also specify the specific grade/degree of slope. Storage of containerized waste on significant slopes is not appropriate.	Remove the sloped outdoor access ramp from the DWMU, and allow staging only.				
31	Part A, XI, Attachment A, Table A-1, 221-T BY Storage Area, Notes	Verify the construction of the 221-T BY Storage Area with respect to 761.65(b) standards.		TSCA requirements.			
32	Attachment A, Table A-2, footnote b	The treatment of containment building units is not consistent with the storage in "Calculation ECF-200W-15-0029, Revision 1, Maximum Storage Capacity for the 221-T Building Areas." The Part A form activities are limited to dry, non-containerized waste. The engineering calculation seems to base the storage arrangement and capacity on containerized waste. The proposed storage arrangement may be assumed as a surrogate for "dry, non-containerized waste," but that is not clear. "Dry noncontainerized waste" may be in unique shapes or forms or require specialized access, so the actual storage capacity is different than that calculated by the regular stacking pattern for 208-l drums.	Addendum C will require revisions to address these comments and to support the Part A.				

Review Comment Record		Washington State Department of Ecology Nuclear Waste Program				Date: July 13, 2016	
						Page 7 of 10	
#	Addendum/ Section	Comment or Question	Modification Needed	Basis/Justification	DOE/PRC Response	Ecology Response	Disposition
		Neither storage nor treatment can occur on sections of the canyon deck where access is needed to cells below (7L, 13R, 16R and 17R, as well as those needed for K-basin sludge storage). Also, space will be needed to store cover blocks when removed. This restriction must be considered in storage and treatment capacity calculations.					
33	XI, Attachment A, Section A3.2, 1 st paragraph, last sentence	This outdoor storage area is not suitable for container storage, as noted earlier. On a second note, the density of storage proposed on the ramp area precludes access through the rolling door. It does not seem appropriate to authorize storage in access routes.	Remove the outdoor storage area from this DWMU.				
34	XI, Attachment A, Section A3.3, 1 st paragraph, last two sentences	If "segregation" refers to separating incompatible waste, plastic spill tubs are not appropriate within a single cabinet - incompatible waste should never be in the same cabinet, regardless of spill tubs.	Review and correct if needed.				
35	XI, Section A3.4, 1 st paragraph	The permit must describe operating procedures and requirements that allow access to the cells via the crane. The relationship between operations at this DWMU and the 221-T Canyon Deck must be described to ensure permitted activities do not conflict with one another. E.g., no treatment or storage activities should be allowed on the canyon deck over the cited cells, as well as areas that need to be available to store cover blocks to be removed to access any of the cited cells.	Provide additional descriptions on crane operation and coordination between the canyon deck and the cells in Addendum C.				
36	XI, Attachment A, Section A3.4, 2 nd paragraph, last sentence	The language says, "Wastes containing free liquids must be managed with portable secondary containment..." This language contradicts the previous sentence that states "Four process cells (7L, 13R, 16R, and 17R) are identified as containment building cells certified for storage and treatment of dangerous, noncontainerized dry waste only." This inconsistency makes the language unenforceable.	Need to verify if wastes containing free liquids will be placed in the process cells. Clarify the language to be consistent and correct.				
37	XI, Attachment A, Section A3.4, 2 nd paragraph, last three sentences	Since the bottom of the cells are ~ 29 feet below the canyon deck and can only be accessed using the overhead crane, how can containers be successfully placed on standard spill pallets? The previous sentence says only dry noncontainerized waste will be managed – why would such non-containerized waste be placed on a spill pallet; and if it is dry, why would spill pallets be required?	Need to verify if wastes containing free liquids will be placed in the process cells. This language needs to be revised accordingly. Much more detail is needed in Addendum C (for example, see the K Basins sludge storage plans).				
38	XI, Attachment A, Section A3.4, 2 nd paragraph, last sentence, "berms"	How does a berm provide secondary containment? How might berms be constructed within cells? If the canyon cells have drain structures, constructing berms would not seem to provide adequate secondary containment.	Addendum C will need much more detailed information on the types of wastes, when waste would be stored, how it would be stored, etc. Verify if wastes				

Review Comment Record		Washington State Department of Ecology Nuclear Waste Program				Date: July 13, 2016	
						Page 8 of 10	
#	Addendum/ Section	Comment or Question	Modification Needed	Basis/Justification	DOE/PRC Response	Ecology Response	Disposition
			containing free liquids will be placed in the process cells.				
39	XI, Attachment A, Section A3.4, 3 rd paragraph	Some of these technologies (deactivation, neutralization, etc.) are typically for liquid waste streams. However, until it has been verified whether wastes containing free liquid will be placed in the process cells, these treatment technologies may not apply to this DWMU. Other technologies seem impracticable to conduct remotely using a crane. For example, various extraction technologies include high pressure water washing or water spraying. Although these technologies are allowable under the label of "extraction technologies" (40 CFR 268.45), they seem incompatible with the canyon cells, not practicable to implement with an overhead crane, and not suitable to conduct within spill pallets.	The permit application must ensure each and every treatment technology is fully compatible with the dangerous waste management unit for which permit authorization is being sought.				
40	XI, Attachment A, Section A3.4, 3 rd paragraph	"A diverse range of waste can be stored in the containment cells, including contaminated process equipment and noncontainerized dry waste." Such text is not useful.	Addendum C must document exactly what is and what is not permitted.				
41	XI, Attachment A, Section A3.4, 4 th paragraph	The text earlier said dry, noncontainerized waste would be stored, but this says "Liquids can be present...but additional secondary containment is required." There is no discussion of what this "additional secondary containment" might be. Secondary containment requirements might be different for storage of a container of wastes compared to active treatment such as high-pressure water or steam sprays. The permit application is incomplete without details of how all 303-630 requirements are to be met in all scenarios.	Addendum C will need to include more information to address requirements of this comment. The Part A will need to be revised accordingly.				
42	XI, Attachment A, Section A3.5, 2 nd paragraph, 2 nd sentence	The sentence, "The amount and type of equipment on the canyon deck can vary with treatment and storage support requirements" is too broad. Ecology cannot determine at any particular point in time what is actually allowed and enforceable.	Remove the following sentence, "The amount and type of equipment on the canyon deck can vary with treatment and storage support requirements." Include a reference to Addendum C for further detail on Canyon Deck activities.				
43	XI, Attachment A, Section A3.5	Specific areas of the canyon deck need to be designated for dangerous/mixed waste management, ensuring accommodation is made for cells that are partly or completely uncovered. Clarify that no waste treatment will occur and no containers will be stored atop the DWMU cells or any cells designated for K-Basin sludge storage.	Addendum C will need to be revised such that accommodations for all the activities in the canyon are considered and addressed. Identify the specific areas of the canyon deck designated for storage and for treatment.				
44	XI, Attachment A, Section A3.6	The first paragraph states, "...normally used only as a transfer and staging area for waste, the 221-T Railroad Tunnel may also be used for waste	Identify the location of storage and treatment activities for this DWMU. Remove outdoor areas from the DWMU.				

Review Comment Record		Washington State Department of Ecology Nuclear Waste Program				Date: July 13, 2016	
						Page 9 of 10	
#	Addendum/ Section	Comment or Question	Modification Needed	Basis/Justification	DOE/PRC Response	Ecology Response	Disposition
		storage and treatment.” This is not sufficient description of the planned use of the DWMU. Ecology does not support use of the ramp and asphalt pad outdoor storage area as part of the DWMU.	They may be used for staging, but that needs to be clarified.				
45	XI, Attachment A, Section A3.8, 2 nd paragraph	The “ECF-200W-15-0030, Rev 0 Secondary Containment and Maximum Storage Capacity for the 2706-T Building,” indicates a total secondary containment volume of 0.45m³. However, the Part A form states, “2706-T Building does not have engineered secondary containment.” If portable secondary containment is to be used, what is the purpose of the secondary containment capacity calculations? This confusion makes it difficult for Ecology to review the permit modification request.	Please correct and revise Addendum C and Part A accordingly.				
46	XI, Attachment A, Section A3.12, 3rd paragraph	The two flammable waste storage modules (HS-030 and HS-032) need to be separate dangerous waste management units, instead of part of the 2706-T Yard DWMU. These will manage wastes with different management practices, and closure requirements will be different.	Identify these storage modules as separate DWMUs. Revise Addendum C and Part A.				
47	XI, Attachment A, Section A3.15, 2nd and 4th paragraph	Ecology will not permit storage to be authorized on the approach apron and access path to the 214-T building. Storage in an access area poses safety and operational problems. Further, would standards for an enclosed indoor area apply?	Remove the approach apron and access path from the 214-T Building DWMU. It may make sense to designate this area as a staging area. Revise Addendum C accordingly to support this change in the Part A.				
48	XI, Attachment A, Section A4.7, 2nd paragraph, last sentence	There should be a demonstration that no chemicals remain abandoned, and thus classified as solid waste, in the chemical addition room.	Provide this information in Addendum C.				
49	Part A, XI, Attachment A, Section A6	The text is silent on the disposal path for generated waste streams.	Provide clarification of disposal path for generated waste streams, or refer to the Addendum and Section in which this is provided.				
50	Consistency with other Addenda	The closure plan Section H1.5 states, “The Addendum A, Part A Form corresponding to DWMUs in the T Plant OUG identifies various [RCRA] permitted capabilities for the DWMUs, as well as operating DWMUs and closing DWMUs.”	Review and ensure that the statement is correct: “...the Part A identifies various [RCRA] permitted capabilities for the DWMUs, as well as operating DWMUs and closing DWMUs.” The Part A does not currently provide adequate details to meet this statement.	ECY 030-31 <u>2/2/16 workshop agreement:</u> Any information in the Section XIX “Comments” section must be consistent with the rest of the information in the Part A and unit group Permit chapter.			
Comments specific to the LLBG Trenches 31-34-94							
51	Part A, XI	LLBG Trenches 31 and 34 Container Storage and Treatment Pads do not provide adequate information to permit. Descriptions of the storage	Provide more complete descriptions of the requirements in Addendum C.				

Review Comment Record			Washington State Department of Ecology Nuclear Waste Program				Date: July 13, 2016
							Page 10 of 10
#	Addendum/ Section	Comment or Question	Modification Needed	Basis/Justification	DOE/PRC Response	Ecology Response	Disposition
		requirements must be more complete in Addendum C.					
52	Part A, XI	Unclear how the volume of estimated annual quantity of container treatment could be accurate given it exceeds the total design capacity for the trenches (e.g. 3130 metric tons capacity for the trenches vs. stated design capacity for the storage/treatment pads-6400 metric tons). As stated, all containers on the pads will be disposed of within the trenches. Please clarify.					
53	Part A, XI, Section A4.1	Reference to the approved closure plan and permit modification for FS-1 was not included.	Provide this reference.				